Product Datasheet

ExxonMobil Signature Polymers

ExxonMobil™ LLDPE LL 6301 Series Molding

Linear Low Density Polyethylene Resin

Product Description

LL 6301 series are medium density LLDPE grades, with a relatively high molecular weight, resulting in molded articles which are very tough and exhibit excellent environmental stress cracking resistance. When compared to LDPE grades of equivalent density, LL 6301 grades exhibits a higher heat deflection temperature and a significantly greater resistance to long term creep.

General

Availability [1]	▪ Africa & Middle East	▪ Asia Pacific	▪ Europe
Additive	▪ LL 6301RQ Molding: Thermal Stabilizer: Yes	▪ LL 6301XR Molding: Thermal Stabilizer: Yes	
Applications	▪ Caps ▪ Compounding (RQ version)	▪ Housewares ▪ Technical Parts	▪ Threaded Closures
Form(s)	▪ LL 6301XR Molding: Pellets	▪ LL 6301RQ Molding: Powder	
Revision Date	▪ 04/01/2017		

Resin Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Density	0.936	g/cm³	0.936	g/cm³	ASTM D1505
Melt Index (190°C/2.16 kg)	5.0	g/10 min	5.0	g/10 min	ExxonMobil Method
Peak Melting Temperature	257	°F	125	°C	ExxonMobil Method

Thermal	Typical Value (English)		Typical Value (SI)		Test Based On
Vicat Softening Temperature	237	°F	114	°C	ISO 306

Molded Properties	Typical Value (English)		Typical Value (SI)		Test Based On
Tensile Stress at Yield	2200	psi	15	MPa	ISO 527-2/1A/50
Tensile Strain at Yield	10	%	10	%	ISO 527-2/1A/50
Tensile Strain at Break	> 100	%	> 100	%	ISO 527-2/1A/50
Flexural Modulus	67000	psi	470	MPa	ISO 178
Environmental Stress-Crack Resistance					ASTM D1693
122°F (50°C), 10% Igepal	40	hr	40	hr	

Impact	Typical Value (English)		Typical Value (SI)		Test Based On
Notched Izod Impact Strength	15	ft·lb/in²	32	kJ/m²	ISO 180/1A

Legal Statement

Contact your ExxonMobil Chemical Customer Service Representative for potential food contact application compliance (e.g. FDA, EU, HPFB).

This product is not intended for use in medical applications and should not be used in any such applications.

Processing Statement

Molded properties were measured on 2 mm (78.7 mil) thick compression molded plaques prepared based on ASTM D 4703 Procedure C (177C, 15C/min): ESCR 2 mm plaques, notch condition B.

Notes

Typical properties: these are not to be construed as specifications.

[1] Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

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For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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